# RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10579596

Source: IFWP

Date Processed by STIC: 5-26-06

# *ENTERED*

IFWP

RAW SEQUENCE LISTING                    DATE: 05/26/2006
PATENT APPLICATION:  US/10/579,596      TIME: 08:12:41

Input Set : A:\21351YP SEQLIST.TXT
Output Set: N:\CRF4\05262006\J579596.raw

```
 4 <110> APPLICANT: Freedman, Leonard P.
 5        Glantschnig, Helmut
 6        Harada, Shun-ichi
 7        Hess, John W.
 9 <120> TITLE OF INVENTION: CYNOMOLGUS MONKEY DICKKOPF-4,
10        NUCLEOTIDES ENCODING SAME, AND USES THEREOF
13 <130> FILE REFERENCE: 21351YP
```
C--> 15 <140> CURRENT APPLICATION NUMBER: US/10/579,596
C--> 15 <141> CURRENT FILING DATE: 2006-05-17
```
   15 <150> PRIOR APPLICATION NUMBER: PCT/US2004/037799
   16 <151> PRIOR FILING DATE: 2004-11-12
   18 <150> PRIOR APPLICATION NUMBER: 60/520,569
   19 <151> PRIOR FILING DATE: 2003-11-17
   21 <160> NUMBER OF SEQ ID NOS: 13
   23 <170> SOFTWARE: FastSEQ for Windows Version 4.0
   25 <210> SEQ ID NO: 1
   26 <211> LENGTH: 675
   27 <212> TYPE: DNA
   28 <213> ORGANISM: MACACA FASCICULARIS
   30 <400> SEQUENCE: 1
   31 atggcggcgg ccgtcctgct gggactgagc tggctctgct ctcccctggg agctctggtc 60
   32 ctggacttca acaacatcag gagctctgct gacctgcttg gggcccggaa gggctcacag 120
   33 tgcctgtctg acacagactg caataccaga aagttctgcc tccagtccca caatgagaag 180
   34 ccgttctgtg ctacatgtcg tgggttgcag aggaggtgcc agcgagatgc catgtgctgc 240
   35 cctgggacac tctgcatgaa tgatgtttgt actacgatgg aagacgcaac cccaaaattg 300
   36 gaaaggcagc ttgatgagca agatggcaca catgcagaag taacaactgg cacccagtc 360
   37 caggaaaacc aacccaagag gaagccaagt attaagaaat cacaaggcag gaagggacaa 420
   38 gagggagaaa gttgtctgag aacttttgac tgtggccctg actttgctg tgctcgtcat 480
   39 ttttggacga aaatttgtaa gccagtcctt ttggagggac aggtctgctc caggagaggg 540
   40 cataaagaca ctgctcaagc tccagaaatc ttccagcgtt gcgactgtgg ccccggacta 600
   41 ctgtgtcgaa gccaactgac cagcaatcag cagcatgcac ggttacgagt atgccaaaaa 660
   42 atagaaaagc tataa 675
   44 <210> SEQ ID NO: 2
   45 <211> LENGTH: 224
   46 <212> TYPE: PRT
   47 <213> ORGANISM: MACACA FASCICULARIS
   49 <400> SEQUENCE: 2
   50 Met Ala Ala Ala Val Leu Leu Gly Leu Ser Trp Leu Cys Ser Pro Leu
   51 1               5                   10                  15
   52 Gly Ala Leu Val Leu Asp Phe Asn Asn Ile Arg Ser Ser Ala Asp Leu
   53            20                  25                  30
   54 Leu Gly Ala Arg Lys Gly Ser Gln Cys Leu Ser Asp Thr Asp Cys Asn
   55         35                  40                  45
```

```
56 Thr Arg Lys Phe Cys Leu Gln Ser His Asn Glu Lys Pro Phe Cys Ala
57     50                  55                  60
58 Thr Cys Arg Gly Leu Gln Arg Arg Cys Gln Arg Asp Ala Met Cys Cys
59 65                  70                  75                  80
60 Pro Gly Thr Leu Cys Met Asn Asp Val Cys Thr Thr Met Glu Asp Ala
61                  85                  90                  95
62 Thr Pro Lys Leu Glu Arg Gln Leu Asp Glu Gln Asp Gly Thr His Ala
63              100                 105                 110
64 Glu Val Thr Thr Gly His Pro Val Gln Glu Asn Gln Pro Lys Arg Lys
65          115                 120                 125
66 Pro Ser Ile Lys Lys Ser Gln Gly Arg Lys Gly Gln Glu Gly Glu Ser
67     130                 135                 140
68 Cys Leu Arg Thr Phe Asp Cys Gly Pro Gly Leu Cys Cys Ala Arg His
69 145                 150                 155                 160
70 Phe Trp Thr Lys Ile Cys Lys Pro Val Leu Leu Glu Gly Gln Val Cys
71                 165                 170                 175
72 Ser Arg Arg Gly His Lys Asp Thr Ala Gln Ala Pro Glu Ile Phe Gln
73             180                 185                 190
74 Arg Cys Asp Cys Gly Pro Gly Leu Leu Cys Arg Ser Gln Leu Thr Ser
75          195                 200                 205
76 Asn Gln Gln His Ala Arg Leu Arg Val Cys Gln Lys Ile Glu Lys Leu
77     210                 215                 220
80 <210> SEQ ID NO: 3
81 <211> LENGTH: 841
82 <212> TYPE: DNA
83 <213> ORGANISM: HOMO SAPIENS
85 <400> SEQUENCE: 3
86 gcacgagaga cgacgtgctg agctgccagc ttagtggaag ctctgctctg ggtggagagc 60
87 agcctcgctt tggtgacgca cagtgctggg accctccagg agccccggga ttgaaggatg 120
88 gtggcggccg tcctgctggg gctgagctgg ctctgctctc ccctgggagc tctggtcctg 180
89 gacttcaaca acatcaggag ctctgctgac ctgcatgggg cccggaaggg ctcacagtgc 240
90 ctgtctgaca cggactgcaa taccagaaag ttctgcctcc agccccgcga tgagaagccg 300
91 ttctgtgcta catgtcgtgg gttgcggagg aggtgccagc gagatgccat gtgctgccct 360
92 gggacactct gtgtgaacga tgtttgtact acgatggaag atgcaacccc aatattagaa 420
93 aggcagcttg atgagcaaga tggcacacat gcagaaggaa caactgggca cccagtccag 480
94 gaaaaccaac ccaaaaggaa gccaagtatt aagaaatcac aaggcaggaa gggacaagag 540
95 ggagaaagtt gtctgagaac ttttgactgt ggccctggac tttgctgtgc tcgtcatttt 600
96 tggacgaaaa tttgtaagcc agtccttttg gagggacagg tctgctccag aagagggcat 660
97 aaagacactg ctcaagctcc agaaatcttc cagcgttgcg actgtggccc tggactactg 720
98 tgtcgaagcc aattgaccag caatcggcag catgctcgat taagagtatg ccaaaaaata 780
99 gaaaagctat aaatatttca aaataaagaa gaatccacat tgcaaaaaaa aaaaaaaaa 840
100 a                                                                841
102 <210> SEQ ID NO: 4
103 <211> LENGTH: 224
104 <212> TYPE: PRT
105 <213> ORGANISM: HOMO SAPIENS
107 <400> SEQUENCE: 4
108 Met Val Ala Ala Val Leu Leu Gly Leu Ser Trp Leu Cys Ser Pro Leu
109 1                   5                   10                  15
```

```
110 Gly Ala Leu Val Leu Asp Phe Asn Asn Ile Arg Ser Ser Ala Asp Leu
111             20                  25                  30
112 His Gly Ala Arg Lys Gly Ser Gln Cys Leu Ser Asp Thr Asp Cys Asn
113         35                  40                  45
114 Thr Arg Lys Phe Cys Leu Gln Pro Arg Asp Glu Lys Pro Phe Cys Ala
115     50                  55                  60
116 Thr Cys Arg Gly Leu Arg Arg Arg Cys Gln Arg Asp Ala Met Cys Cys
117 65                  70                  75                  80
118 Pro Gly Thr Leu Cys Val Asn Asp Val Cys Thr Thr Met Glu Asp Ala
119             85                  90                  95
120 Thr Pro Ile Leu Glu Arg Gln Leu Asp Glu Gln Asp Gly Thr His Ala
121         100                 105                 110
122 Glu Gly Thr Thr Gly His Pro Val Gln Glu Asn Gln Pro Lys Arg Lys
123         115                 120                 125
124 Pro Ser Ile Lys Lys Ser Gln Gly Arg Lys Gly Gln Glu Gly Glu Ser
125     130                 135                 140
126 Cys Leu Arg Thr Phe Asp Cys Gly Pro Gly Leu Cys Cys Ala Arg His
127 145                 150                 155                 160
128 Phe Trp Thr Lys Ile Cys Lys Pro Val Leu Leu Glu Gly Gln Val Cys
129             165                 170                 175
130 Ser Arg Arg Gly His Lys Asp Thr Ala Gln Ala Pro Glu Ile Phe Gln
131             180                 185                 190
132 Arg Cys Asp Cys Gly Pro Gly Leu Leu Cys Arg Ser Gln Leu Thr Ser
133             195                 200                 205
134 Asn Arg Gln His Ala Arg Leu Arg Val Cys Gln Lys Ile Glu Lys Leu
135     210                 215                 220
138 <210> SEQ ID NO: 5
139 <211> LENGTH: 221
140 <212> TYPE: PRT
141 <213> ORGANISM: MUS MUSCULUS
143 <400> SEQUENCE: 5
144 Met Val Leu Val Thr Leu Leu Gly Leu Ser Trp Phe Cys Ser Pro Leu
145 1                   5                   10                  15
146 Ala Ala Leu Val Leu Asp Phe Asn Asn Ile Lys Ser Ser Ala Asp Val
147             20                  25                  30
148 Gln Gly Ala Gly Lys Gly Ser Leu Cys Ala Ser Asp Arg Asp Cys Ser
149         35                  40                  45
150 Glu Gly Lys Phe Cys Leu Ala Phe His Asp Glu Arg Ser Phe Cys Ala
151     50                  55                  60
152 Thr Cys Arg Arg Val Arg Arg Arg Cys Gln Arg Ser Ala Val Cys Cys
153 65                  70                  75                  80
154 Pro Gly Thr Val Cys Val Asn Asp Val Cys Thr Ala Val Glu Asp Thr
155             85                  90                  95
156 Arg Pro Val Met Asp Arg Asn Thr Asp Gly Gln Asp Gly Ala Tyr Ala
157         100                 105                 110
158 Glu Gly Thr Thr Lys Trp Pro Ala Glu Glu Asn Arg Pro Gln Gly Lys
159         115                 120                 125
160 Pro Ser Thr Lys Lys Ser Gln Ser Ser Lys Gly Gln Glu Gly Glu Ser
161     130                 135                 140
```

```
162 Cys Leu Arg Thr Ser Asp Cys Gly Pro Gly Leu Cys Cys Ala Arg His
163 145                 150                 155                 160
164 Phe Trp Thr Lys Ile Cys Lys Pro Val Leu Arg Glu Gly Gln Val Cys
165                 165                 170                 175
166 Ser Arg Arg Gly His Lys Asp Thr Ala Gln Ala Pro Glu Ile Phe Gln
167                 180                 185                 190
168 Arg Cys Asp Cys Gly Pro Gly Leu Thr Cys Arg Ser Gln Val Thr Ser
169         195                 200                 205
170 Asn Arg Gln His Ser Arg Leu Arg Val Cys Gln Arg Ile
171     210                 215                 220
174 <210> SEQ ID NO: 6
175 <211> LENGTH: 24
176 <212> TYPE: DNA
177 <213> ORGANISM: Artificial Sequence
179 <220> FEATURE:
180 <223> OTHER INFORMATION: F2 PRIMER
182 <400> SEQUENCE: 6
183 caggagcccc gggattgaag gatg                                       24
185 <210> SEQ ID NO: 7
186 <211> LENGTH: 38
187 <212> TYPE: DNA
188 <213> ORGANISM: Artificial Sequence
190 <220> FEATURE:
191 <223> OTHER INFORMATION: R2 PRIMER
193 <400> SEQUENCE: 7
194 gcaatgtgga ttcttcttta ttttgaaata tttatagc                        38
196 <210> SEQ ID NO: 8
197 <211> LENGTH: 31
198 <212> TYPE: DNA
199 <213> ORGANISM: Artificial Sequence
201 <220> FEATURE:
202 <223> OTHER INFORMATION: F PRIMER
204 <400> SEQUENCE: 8
205 gcgaattcac catggcggcg gccgtcctgc t                               31
207 <210> SEQ ID NO: 9
208 <211> LENGTH: 37
209 <212> TYPE: DNA
210 <213> ORGANISM: Artificial Sequence
212 <220> FEATURE:
213 <223> OTHER INFORMATION: FF PRIMER
215 <400> SEQUENCE: 9
216 gcgaattcac catggcggcg gccgtcctgc tgggact                         37
218 <210> SEQ ID NO: 10
219 <211> LENGTH: 42
220 <212> TYPE: DNA
221 <213> ORGANISM: Artificial Sequence
223 <220> FEATURE:
224 <223> OTHER INFORMATION: R PRIMER
226 <400> SEQUENCE: 10
```

RAW SEQUENCE LISTING                    DATE: 05/26/2006
PATENT APPLICATION:  US/10/579,596      TIME: 08:12:41

            Input Set : A:\21351YP SEQLIST.TXT
            Output Set: N:\CRF4\05262006\J579596.raw

```
227 gcgaattcta gcttttctat tttttggcat actcgtaacc gt                    42
229 <210> SEQ ID NO: 11
230 <211> LENGTH: 47
231 <212> TYPE: DNA
232 <213> ORGANISM: Artificial Sequence
234 <220> FEATURE:
235 <223> OTHER INFORMATION: RR PRIMER
237 <400> SEQUENCE: 11
238 gcgaattcta gcttttctat tttttggcat actcgtaacc gtgcatg               47
240 <210> SEQ ID NO: 12
241 <211> LENGTH: 22
242 <212> TYPE: DNA
243 <213> ORGANISM: Artificial Sequence
245 <220> FEATURE:
246 <223> OTHER INFORMATION: Fseq PRIMER
248 <400> SEQUENCE: 12
249 gggacactct gcatgaatga tg                                          22
251 <210> SEQ ID NO: 13
252 <211> LENGTH: 21
253 <212> TYPE: DNA
254 <213> ORGANISM: Artificial Sequence
256 <220> FEATURE:
257 <223> OTHER INFORMATION: Rseq PRIMER
259 <400> SEQUENCE: 13
260 tgccatcttg ctcatcaagc t                                           21
```

**VERIFICATION SUMMARY**                DATE: 05/26/2006
PATENT APPLICATION:  **US/10/579,596**        TIME: 08:12:42

        Input Set : **A:\21351YP SEQLIST.TXT**
        Output Set: **N:\CRF4\05262006\J579596.raw**

L:15 M:270 C: Current Application Number differs, Replaced Current Application No
L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date